MANAGED FUTURES AS A PORTFOLIO DIVERSIFICATION INSTRUMENT

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Summary

The author analyses one type of hedge funds styles – managed futures and shows that they are developing dynamically. Their correlation and rates of return are compared with other asset classes in order to prove that these funds are worth considering to be incorporated into traditional investment portfolios.

1. Introduction

The name managed futures is used to define actively managed investments on derivatives markets, mostly futures contracts and options. Similarly to traditional capital or money market instruments, investors can control their financial means on their own or give them to financial specialists, paying fixed fees and commission. As far as investments in stocks and bonds are concerned, investors can choose from various offers of investment funds and find suitable risk profiles. As for managed futures, the only possibility of taking advantage of their virtues is to invest directly on the market or by the use of hedge funds whose conditions of investments are not as rigid, clear and safe as in investment funds.

2. Purpose and range of examinations

The paper shows that managed futures become more and more popular type of investments. This is due to their unique features discussed beneath which let use these alternative investments for portfolio diversification. The author analysed net asset value of managed futures since 1985 to 2007, as well as their correlation with other assets in 1994 – 2007 and compared these funds with such investments as stocks and bonds in 1995 – 2004. Managed futures were also compared with other hedge fund styles in 1997 – 2006. Different examination periods are due to different data availability, however the author paid attention to the fact that the analysis was conducted in periods lasting for at least ten years because managed futures are long-term investments and should not be evaluated in a short run.

3. Correlation of managed futures with stocks and bonds

Managed futures funds are one type of hedge funds. As V.Q.Tran reports, they trade mostly on regulated exchanges in financial and commodity futures, but also in over-the-counter markets of banks and brokers.[1] By using short sale investors can make profits also during a bear market, not only when the market is growing. It means that profits are irrespective of investing climate. It is an indisputable advantage of managed futures funds. Thus, hedge funds let investors achieve low correlation with other types of investments (see Table 1), which makes them good diversification strategies to be incorporated into the portfolio. In 1994 – 2007 managed futures correlation with world stocks was extremely low and negative (-0,09). It means that managed futures profits are almost totally independent from world stocks. As for correlation with world bonds, it is positive and a bit higher than in the case of stocks, however 0,23 is still quite low.

The numbers discussed above explain why managed futures are considered alternative investments apart from other types of hedge funds strategies, structured products, private equity, management buy-out, equity, gold, metals or art banking. One of the typical features of these investments is that they have limited liquidity and, which results from it, they require long horizon of investments.

Table 1. ***Correlation of stocks and bonds (from January 1994 to September 2007).***

	World stocks	World bonds	Managed futures
Managed futures	-0,09	0,23	1,00
World bonds	0,07	1,00	
World stocks	1,00		

Source: Man Investments and Bloomberg, 15 February 2008.

4. Managed futures development

Managed futures let both individual and institutional investors profit from advantages coming from derivative instruments. The first managed futures fund was created in the United States in 1949 by Richard D. Donchian Futures Inc. The next one was Dun & Hargitt International Group started in 1965. However, on a large scale such investments started to appear in the seventies. C.Beverly emphasizes[2] that there were 225 funds of this type in 1975, whereas in 1983 their number was higher than 3000. It is worth mentioning that at the moment, the biggest public limited

[1] See: V.Q.Tran, Evaluating Hedge Fund Performance, John Wiley & Sons, Inc., New Jersey 2006, p. 62.

[2] C. Beverly, Managed Futures – an Investor's Guide, John Wiley and Sons, inc., New Jersey 1994, p. 17.

company managing hedge funds is Man Group. The sum of assets offered by it in its funds was according to Reuters[3] 71,7 billion dollars at the end of 2007.

As far as the biggest European managed futures programs are concerned, they were launched in Great Britain (see Table 2). These are Winton Capital Management with its net asset value equal 6640 million USD and Aspect Capital having net asset value of 5225 million USD. The third one, however with assets more than three times lower, is the Netherlands with its 1698 million USD program. Further places in top ten are occupied by programs issued in France (1674 million USD), Ireland (1552,7 million USD), again the Netherlands (1002,5 million USD), Ireland again (960,2 million USD) and Sweden (886,9 million USD). But as the cited numbers show, all of them are a few times smaller programs than the top two.

Table 2. ***Top 10 European managed futures programs (million USD)***

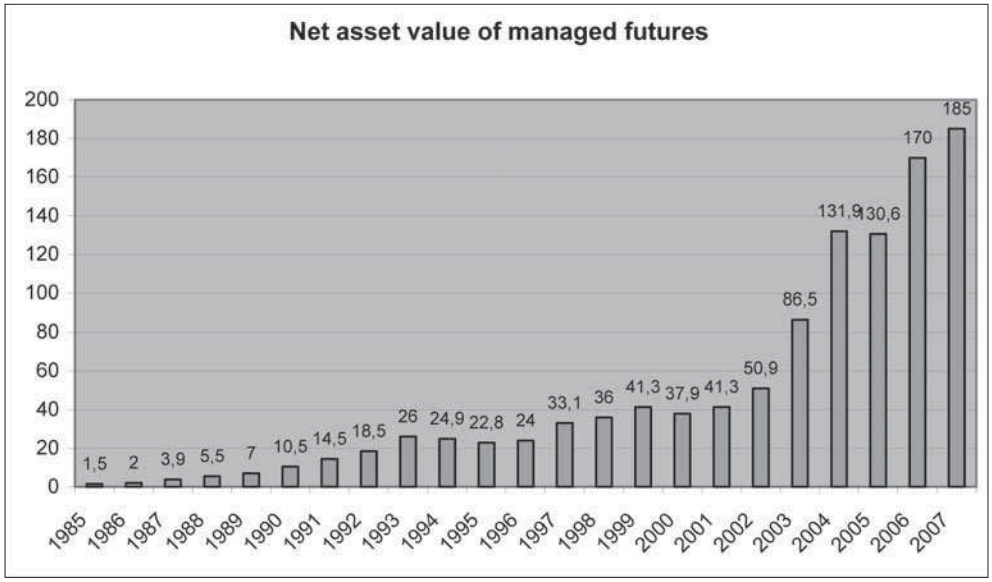
	Name	Net asset value	Country
1.	Winton Capital Management (Diversified)	6640,0	Great Britain
2.	Aspect Capital (Div. Fund (USD))	5225,0	Great Britain
3.	Transtrend (DTP/Enhanced Risk – USD)	1698,0	The Netherlands
4.	Capital Fund Mgmt (Discus)	1674,5	France
5.	iKOS Partners (Financial Tool)	1552,7	Ireland
6.	iKOS Partners (Financial – EUR)	1552,7	Ireland
7.	iKOS Partners (Financial – USD)	1552,7	Ireland
8.	Transtrend (OTP/Enhanced Risk – EUR)	1002,5	The Netherlands
9.	iKOS Partners	960,2	Ireland
10.	Brummer&Partners (Lynx)	886,9	Sweden

Source: prepared by the author on the basis of: Z. Steve, European CTAs: Out of the muddle?, Futures: News, Analysis & Strategies for Futures, Options & Derivatives Traders, February 2007.

Another significant point to be analyzed is the net asset value of managed futures and its development over the years. If one looks at Chart 1, it is noticeable that the net asset value of managed futures has been growing since 1985. In 1985 it was at the level of 1,5 billion dollars and was growing systematically up to 185 billion dollars in 2007. It means a more than 120 times increase in 22 years. It approves of the thesis that this market has developed dynamically for many years so far. It is probably due to their low correlation coefficients with other asset classes discussed earlier.

[3] F. Laurence, Hedge fund firm Man Group assets up but sales slow, www.reuters.com, 15.01.2008.

Chart 1. ***Net asset value in managed futures funds in 1985 – 2007 (billion USD)***



Source: prepared by the author on the basis of: www.barclayhedge.com, 15.02.2008.

However, one should not forget that managed futures cannot protect against adverse market conditions in a short period of time. If markets suddenly sell off after a strong rally, managed futures will lose money. It usually takes them between one or two weeks to reposition themselves. If a bear market lasts for several months, managed futures can benefit from this situation by building up short positions. Nevertheless, fast reversals can be partially protected with exposures into other markets or with short-term strategies. Quite often, managed futures systems are already positioned short in crisis scenarios, even before the final price collapses.[4]

5. Managed futures vs. traditional assets

When constructing a portfolio made from futures and forward contracts, such factors are being considered as: correlation coefficients with other assets, expected rates of return, transaction costs as well as liquidity of the market were positions are to be taken. The amount of open positions is adjusted to all mentioned factors, which lets control the level of risk.

[4] T.D. Casa, M. Rechsteiner, A. Lechmann, De-mystifying managed futures – why first class research and innovation are key to stay ahead of the game, Man Investments, 01 November 2007, p. 26.

The following part of the paper compares managed futures rated of return with other kinds of securities. It shows that they can be both better and worse investments than others. This is why the author does not suggest buying managed futures as the only investment but including them into other assets possessed in a portfolio.

The performance of managed futures varies from year to year and depends on how well markets are trending. They tend to perform well when there are long, sustained trends – either up or down. They do not perform so well when markets are range-bound or when trends suddenly reverse.[5]

Table 3. ***Performance of selected asset classes in 1995 – 2004.***[6]

Year	International Stocks[5]	Managed Futures[6]	Bonds[7]	U.S. Stocks[8]
1995	9,4%	13,6%	30,7%	37,6%
1996	4,4%	9,1%	-0,4%	22,9%
1997	0,3%	10,9%	14,9%	33,4%
1998	18,2%	7,0%	13,5%	28,6%
1999	25,3%	-1,2%	-8,7%	21,0%
2000	-15,2%	7,9%	20,1%	-9,1%
2001	-22,6%	0,8%	4,6%	-11,9%
2002	-17,5%	12,4%	17,2%	-22,1%
2003	35,3%	8,7%	2,1%	28,7%
2004	17,6%	3,3%	8,0%	10,9%
Compound Return	3,9%	7,2%	9,7%	12,1%

Source: Data of the Barclay Trading Group Ltd.

If one looks at compound returns in 1995 – 2004 (see Table 3), it is easy to see that managed futures let achieve almost twice as good rate of return as international stocks. At the same time, it was two and a half points lower than bonds and about five points lower than U.S. stocks. The analysis of every year performance shows that managed futures generated minus results only in 1999, i.e. for one year only and what's more, it was just – -1,2%, whereas for international stocks it was three years when rates of return were negative. Besides they were much lower than for managed futures, that is in 2000 – -15,2%, in 2001 – -22,6%, in 2002 – -17,5%. For bonds there were two years with negative results: in 1996 – -0,4% and in 1999 – -8,7%. As far as U.S. stocks are concerned, minus rates of return were achieved in 2000 (-9,1%), 2001 – -11,9% and in 2002 – -22,1%. It means that in 2000 – 2002 when stocks gen-

[5] R. Bruce, Hedge fund style series. Understanding managed futures, Man Investments, October 2007, p. 6.

[6] Based on monthly data from 1995 – 2004 on an annualized basis (as percentage of annual return).

erated returns lower than zero, managed futures let achieve positive returns, which proves that they are good instruments to be used for portfolio diversification.

6. Managed futures vs. other hedge funds styles

The last step of examinations to be presented in the paper is looking at managed futures on the basis of other hedge funds strategies. The author depicted rates of return of the most important managed futures styles.

If one compares rates of return of different styles of hedge funds (see Table 4), it is undisputable that managed futures are the worst performer of all of them. The analysis is done for a ten year period, so it is rather representative, however it does not mean that in the future the same results will be observed.

Table 4. ***The comparison rates of return of different hedge funds styles in 1997 – 2006.***

Hedge fund style	Rates of return									
	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006
Event driven	23,4%	16,0%	44,2%	13,4%	12,2%	16,2%	25,3%	14,2%	10,6%	15,3%
Hedge fund index	21,2%	10,3%	31,3%	9,1%	8,9%	7,4%	21,4%	8,9%	9,3%	12,9%
Relative value	18,8%	6,2%	24,3%	7,3%	6,9%	5,4%	20,5%	7,4%	7,3%	12,3%
Equity hedge	16,8%	2,8%	17,6%	6,7%	4,6%	-1,4%	19,6%	5,3%	6,8%	11,7%
Global macro	15,9%	2,6%	14,7%	5,0%	4,3%	-4,3%	10,6%	4,1%	6,0%	8,1%
Managed futures	12,4%	1,7%	-0,6%	2,0%	0,4%	-4,7%	9,7%	2,9%	0,5%	6,0%

Source: prepared by the author on the basis of data gathered by: HFRI, StarkTraders, MCSI, Standard & Poor's Micropal, Man Investments.

In 1997 managed futures made 12,4%, which was the worst result and more than half lower than event driven strategies. In 1998 managed futures generated 1,7% and it was still the lowest score of all strategies. The same conclusions are to be drawn for the rest of examined years up to 2006. It does not sound optimistic, however just from the analysis of rates of return and without comparing standard deviations and correlations with other assets, it would be too risky to say that managed futures are really the worst investments of all hedge fund strategies. However, taking into consideration the limited length of the paper, the author decided not to present such data here.

7. Final word

As it was shown, managed futures have low correlation with other traditional types of assets. It lets consider them alternative investments which help diversify a portfolio of typical instruments. Thanks to these features, the popularity of managed futures is growing. It is proved by rising net asset value, as well as the number of funds increasing year by year. These tendencies let assume that these funds will also develop further in the future.

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